

WHAT IS CLAIMED IS:

1. A battery assembly comprising:
a plurality of battery modules electrically connected together, each
5 battery module acting as a secondary battery and comprising an electrode
group, an electrolyte, a container for housing the electrode group and the
electrolyte, and a safety valve operating in accordance with an internal
pressure of the container,
wherein a working pressure of each safety valve is set so that the
10 safety valve of at least one battery module is opened when the at least one
battery module has its maximum internal pressure or less during charge
equalization.
- 15 2. The battery assembly according to claim 1, wherein the working
pressure of each safety valve is set so that a change in a battery assembly
weight after the charge equalization is 0.015 g or less per ampere-hour
capacity.
- 20 3. The battery assembly according to claim 1, wherein the working
pressure of each safety valve is set to 0.3 to 0.8 MPa under temperature
conditions of 20 to 60 °C.
- 25 4. The battery assembly according to claim 1, wherein each battery
module comprises a plurality of cells electrically connected together.
5. The battery assembly according to claim 4, wherein each battery
module comprises 2 to 10 cells.
- 30 6. The battery assembly according to claim 1, comprising 20 to 50
battery modules.
7. The battery assembly according to claim 1, having an energy density
of 7.5 to 8.5 Wh/kg.
- 35 8. The battery assembly according to claim 1, having a power density
of 500 to 600 W/kg.

9. The battery assembly according to claim 1, wherein each battery module comprises a plurality of cells electrically connected together, and a battery capacity of the battery assembly is 6.5 to 7.2 ampere-hour per cell.

5 10. The battery assembly according to claim 1, wherein the battery assembly is used as a driving power source of a vehicle.

11. A battery assembly comprising:
a plurality of battery modules electrically connected together, each
10 battery module acting as a secondary battery and comprising an electrode group, an electrolyte, a container for housing the electrode group and the electrolyte, and a safety valve operating in accordance with an internal pressure of the container,

15 wherein an amount of the electrolyte in the container is 1.3 to 8.0 g per ampere-hour capacity, and a working pressure of each safety valve is set to 0.3 to 0.8 MPa under temperature conditions of 20 to 60 °C.

12. The battery assembly according to claim 11, wherein each battery module comprises a plurality of cells electrically connected together.

20 13. The battery assembly according to claim 12, wherein each battery module comprises 2 to 10 cells.

14. The battery assembly according to claim 11, comprising 20 to 50
25 battery modules.

15. The battery assembly according to claim 11, having an energy density of 7.5 to 8.5 Wh/kg.

30 16. The battery assembly according to claim 11, having a power density of 500 to 600 W/kg.

17. The battery assembly according to claim 11, wherein each battery module comprises a plurality of cells electrically connected together, and a
35 battery capacity of the battery assembly is 6.5 to 7.2 ampere-hour per cell.

18. The battery assembly according to claim 5, wherein the battery

assembly is used as a driving power source of a vehicle.